

EXHIBIT FIVE

**BINARY
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Project 20810

Stephen Silverman
73 State St, Suite 203
Springfield, MA 01103

Subject: Ostrander v Hussman Corp.

Dear Mr. Silverman:

On August 7, 2002 I visited the Hampden County Sheriff's Office and in the company of Captain Diaz, inspected a meat grinding machine that was involved in an accident that occurred on April 28, 2002 in which Melissa Ostrander was injured. In addition to my inspection of the machine, I have reviewed:

- The depositions of Irene Ring, Cheri Barbosa, William Barry, and Cecilia Fernandes,
- OSHA Inspection Number 304044878 Citation and Notice of Penalty of 6/19/02,
- OSHA Inspection Number 304044878 Safety Narrative of 6/14/02,
- Plaintiff's Answers to Interrogatories of the Defendant Hussman Corporation,
- Various references in the engineering literature.

The subject machine at the time of my inspection is shown in attached photograph 1. It is my understanding that at the time of the accident, Ms Ostrander's hand was pulled into and caught in the machine, and that to extricate her hand the machine had to be dis-assemble, including cutting part of the meat tray at the top of the machine as shown in attached photograph 2.

The machine consists of a motor and auger mechanism enclosed in a base, and intended to sit on a table or counter top. There is a flat removal metal tray at the top of the machine, and a hole at one end through which meat is pushed. As the meat enter the hole, it encounters an auger which pushes the meat through rotating knives and a screen, and is discharged into the users hand or a bowl placed under the discharge.

It is my understanding that Ms Ostrander was feeding the meat into the opening by hand, and using her fingers to push the meat down the

throat of the opening when wither her fingers were caught by the auger and her hand pulled in, or meat caught in the auger pulled her hand in. She managed to turn off the machine using a toggle switch located on the machine, but a co-worker upon arriving at the scene and observing the situation thought the machine was still running, and inadvertently turned the machine on again, further exacerbating Ms Ostrander's injuries.

I was unable to determine the date of manufacture based on any identifying labels on the machine. It is believed to be in excess of 50 years old.

The distance from the opening in the pan to the auger was measured to be 5-1/2 inches, while the opening diameter was approximately 2-1/2 inches.

Based on my inspection it is my opinion that the subject machine was dangerous and defective. Specifically the defects were:

- The opening to the auger was too large in diameter, and/or the distance from the opening to the pan was too short,
- The on/off control was of an inappropriate type,
- There were no warnings regarding the hazard.

My opinion that the opening and distance to the auger were inappropriate is based on published literature dating to at least 1949 (Reference 1) in which the safe distance to a hazard as a function of opening width was delineated. For the subject machine, the opening should either have been 7-1/2 inches from the auger, or the opening limited to 1-1/2 inches. These dimensions should be considered maximums and a smaller opening or longer distance would be desirable. Had such guarding been in place, Ms Ostrander would have been unable to get her hand to the auger.

That alternative designs were feasible at the time the subject machine was manufactured is demonstrated by alternative designs with guards over the openings that prevent fingers from reaching the hazard as testified to by William Barry, and references in the engineering literature to designs for finger guards dating to 1919 (Reference 2).

Emergency stop controls should be appropriately located and separated from the on/off control. Mushroom shaped pushbuttons, which only need to be hit to push them in to stop the machine making them quick to apply in an emergency are typically used as emergency stop buttons on machinery. Such controls typically require that the button be pulled out and the main on/off switch be in the off position before the machine will restart. Had such controls been present, it is unlikely the co-worker could have restarted the machine exacerbating Ms Ostrander's injuries.

While it is this writer's understanding that Ms Ostrander was aware of the potential hazard, it is nonetheless my opinion that appropriate warnings could have prevented this accident. Specifically such a warning should have (Reference 3) identified the hazard (the auger), the consequences of contact with the hazard (amputation or severe injury), the behavior to be avoided (fingers in the opening) and procedures to follow to avoid the hazard (keep fingers out of opening, use plunger). Even though Ms Ostrander was aware of a hazard the record is not clear if she knew the consequences of the hazard, or that her fingers were either close to the auger or susceptible to being drawn in. Had a warning been present it could have altered her behavior thereby preventing the accident.

If you have any questions, do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Wilson G. Dobson", with a long horizontal flourish extending to the right.

Wilson G. Dobson, P.E.

Reference 1: "Safe Openings for Some Point of Operation Guards" Technical Guide No. 2 American Mutual Insurance Alliance Chicago, IL.

Reference 2: "Machine Guarding", Verne Roberts, Institute for Product Safety, 1980, pp 22-23.

Reference 2: "Human Factors in Engineering and Design" Sanders and McCormick, page 683.